FARM MISCELLANY

Fungus Attacks on Telegraph Poles.

The length of service of a telegraph or telephone pole is determined in a section of the pole not more than a foot or a foot and a half long. In a standing pole this section extends about six or eight inches above and below the top of the ground. This is the universal point of attack upon the life of the pole, and is called its breaking point. Decay is the arch-enemy of these poles. It sets in at the ground line and reaches both up and down the pole, but only so far as the conditions exist which promote the growth of wood-destroying fungi. A few inches below the ground there is lack of the necessary oxygen and heat, while at about the same distance above ground the requisite moisture fails. The exact time at which decay begins its work depends upon the climate, the character of the soil and similar conditions. In a hot, moist climate it ordinarily sets in with great rapidity. But at best, in a very few years after the pole is set the struggle has commenced. The decay soon girdles the pole and gradually eats into it deeper and deeper until it is so weakened that it breaks under the weight of its equipment.

The strain upon the pole from wind pressure and the weight of its cross-arms and wires is calculated for the ground line. When the diameter of this ground line is constantly decreased, the strength of the pole is proportionately reduced, and it becomes only a question of time when the pole must fall. Chestnut and white cedar have been found, among available woods, most successfully to resist decay, but the life of the former is only from twelve to fifteen years, and of the latter ten to twelve years. The co-operative study of the bureau is for the purpose of extending, if possible, this time.

The experiments already made by the United States Forestry Bureau show conclusively that poles can be subjected to a preservative treatment which insures materially lengthened service. This treatment consists in impregnating the wood with antiseptics which prevent the growth of the fungi that cause decay. The treatment of telegraph and telephone poles, when attempted at all in this country, generally has been applied to the whole pole, requiring the use of air-tight cylinders 100 feet long or more. In these the poles are subjected to live steam for some time, when a vacuum is created. Creosote is then run in and pressure applied to force it into the wood. Manifestly this is a laborious process. Yet for telegraph and telephone poles only about one foot of the entire length needs to be made immune from fungus. If this foot at the fatal ground line can be preserved from decay, the rest of the pole will take care of itself. Experiments will now be made in treating the butts of the poles for a distance of about eight feet, thus carrying the antiseptics just beyond the zone of decay attack. The creosote method will be used and dead oil of coal tar forced through the butt of the pole.

The telegraph companies have made little use of preservative treatment. They employ millions of poles on their various lines, and it would be a tremendous economy to add even a few years of service to the life of each pole. But there will be another large saving both to them and to the forest through preservative treatment. To provide a good margin against decay, poles are now much larger than demanded by the strain upon them. It is expected that decay will quickly eat away a furrow around the pole at the ground line, and the diameter of the pole at that point is gauged to allow for this weakening process. When it is known that decay, in a certain number of years, cuts the diameter from perhaps 12 to 8 inches, and that below 8 inches the weakened pole falls, the course to be pursued is obvious. Antiseptics prevent, for the time of their effectiveness, the starting of decay, and thus permit at the outset the selection of an 8-inch diameter rather than a 12-inch. The 4 inches saved represent a tremendous difference in the size and age of trees used for poles. Both the companies and the owners of forests will be great gainers by this economy, with its shortening of the length of time necessary to grow a pole.

Corn Seed Not Everything.

It is a pleasure when traveling through the country at this time of the year to see the tall corn shocks thickly covering the wide areas of fertile land. Not many years since corn shocks were most found in the eastern districts and in those districts where dairying is made a specialty. Now one sees corn shocks everywhere, even towards the far west, where cattlemen begin to understand that there is much more nutriment in cut corn fodder than in the weathered corn stalks of the standing husked-out crop. There was a time when straw piles were burned to get rid of them, when manure piles suffered in the same way, when corn stalks were little thought of. These things are less common now, and year by year appreciation of corn forage is increasing.

Under the circumstances it should be apparent that exclusive attention to the improvement of the grain of the corn plant is wrong. It is quite true that corn seed needs improvement everywhere and that the work being done by Prof. Holden and other scientists is admirable and utilitarian. It is important to increase protein in corn, as is being attempted by Prof. Hopkins in Illinois. It will be wise to continue expert judging of corn at the agricultural colleges and by every possible means to educate our young men to a true scientific and practical knowledge of corn and other seeds. But equal attention should be paid to other parts of the plant, apart from the ears.

It is of importance that corn stalks should grow more than one good ear and that the ears should be at a proper distance from the ground; also that the leaves shall be large and numerous. Thirty-foot corn stalks, with ears ten feet from the ground are no improvement. Tall, spindly plants, with small, ribbonlike leaves and one large ear too far from the ground are not an improvement. The best corn plant must be a dual purpose one, combining fine ears of the best seeds on small cobs and withal a great abundance of large, wide leaves which will insure a bountiful fodder crop. Let us not lose sight of these things in seeking to improve corn seed. Let us endeavor to improve the entire plant for every purpose to which it can be put and in so doing there will result the greatest benefit to farmers.

Small Flies in Milk.

I ship my milk to the city, usually sending about four cans. One day, a few weeks ago, I received all the cans back because in one there were a number of tiny flies, hardly visible unless they were in great numbers. I felt badly to have every can returned when only one was at fault, for I had taken great care with my milk and rather prided myself on my cleanliness. Just how the flies got in the milk I do not know, for it was all carefully strained and then put in the tank to cool, and fresh water pumped in. Whether the flies were in the can, or whether they came while the milk was in the water cooling, I do not know, and I have wondered if other farmers have been troubled in this same way. At any rate, I made up my mind that there would be no more flies in my milk, so now I use two sets of cans, and after I take the milk from the cooler, I strain it again into clean cans. I have had no further trouble with the little pests, although it means some more work and a double number of cans to be used.—S. E. Langworthy in Farmers' Review.